

The actuators 506<sub>1</sub>-506<sub>p</sub> comprise rotary devices, such as potentiometers or rotatable shaft encoders. One or more of these actuators can have a dedicated function irrespective of the execution of a current S-MEM. Others of the actuators 506<sub>1</sub>-506<sub>p</sub> can control a function associated with one or more devices in the context of a particular S-MEM, whereas, in the context of a different S-MEM, the actuators will control a different function associated with the same or different devices.

Like each of actuators 502<sub>1</sub>-502<sub>z</sub>, each of actuators 508<sub>1</sub>-508<sub>c</sub> typically comprises a push button. As compared to the push buttons 502<sub>1</sub>-502<sub>z</sub>, the majority of which are context dependent, the majority of the push buttons 508<sub>1</sub>-508<sub>c</sub> have dedicated roles, e.g., accomplishing "preview", "next page", "cut", and "transmit" operations to name but a few.

The Actuator 510 comprises a joystick, the function of which is typically context dependent. Thus, depending on the execution of a particular S-MEM, the joystick 510 could serve to pan and tilt a first television camera, whereas in the context of another S-MEM, the joystick could operate a video replay device.

Lastly, the control panel 302 can include a plurality of audio level monitors 512<sub>1</sub>-512<sub>j</sub>, where *j* is an integer greater than zero. Each of the audio level monitors provides an indication, typically by means of a bar indicator, of the level of a particular audio device, such as a microphone, for example, in the context of a particular S-MEM. Thus for example, in connection with a particular S-MEM, a given one of the audio level monitors will indicate the audio level of a particular microphone, while in connection with a different S-MEM, the same audio indicator will indicate the level of a different microphone.

In practice, each of audio level monitors 512<sub>1</sub>-512<sub>j</sub> lies aligned with a corresponding one of the faders 504<sub>2</sub>-504<sub>z</sub>. To the extent that a particular one of the faders 504<sub>2</sub>-504<sub>z</sub> controls a particular audio device, such as a microphone, in connection with a particular S-MEM, the audio level monitor aligned with that fader will indicate the level of that controlled device.

FIGURE 7 depicts a electrical block diagram of the control panel 302 of FIG 4. A single board microcomputer 600 serves as the controller for the control panel 302. The microcomputer 600 has address, data, and control busses, through which the microcomputer connects to a Random Access Memory 602, a Flash Memory 604, and a mass storage device 606, typically in the form of a magnetic hard disk drive. In practice, the hard disk drive 606 will contain program instructions, whereas the flash memory 604 can contain a basic input/output operating system (BIOS). The microcomputer 600 has interfaces 608 and 610

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# ABSTRACT OF THE DISCLOSURE

A television production system (300) affords simplification over the automation of a television program such as a news program by making use of State Memory Objects (S-MEMs), each defining one or more operations for execution by one or more production devices. The S-MEMS serve to control one or more actuators on a control panel (302) so that each actuator on the control panel can control different function of different pieces of production equipment depending on the S-MEM selected, *and the actuator manifests a status of the production device.*